the two measures over time (r=0.2; 95% CI 0.18-0.23). From the data collected thus far from the entire population, fastest PVT mean reaction times were found on Saturdays and slowest on Tuesdays. Similarly, KSS had best scores in weekends. There was an overall increase in mean PVT reaction time during the investigated period from June to November. This was also observed in KSS.

Conclusion: Our findings show a moderate correlation between the mean PVT reaction time and Karolinska Sleepiness Scale with up to 365 datapoints per subject with weekly and seasonal trends observed.

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0021

THE EFFECT OF VIDEO GAMING ON THE SLEEP PATTERNS AND WELL-BEING OF U.S. MARINES

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Introduction: Video gaming (VGs) is a popular activity among active-duty service members (ADSMs) and can have both positive and negative impacts on ADSM well-being and behavior. The overall aim of the project was to assess attributes and aspects of video gaming in the United States Navy and Marine Corps (USMC). Our current results specifically address the effects of video gaming on the sleep patterns of Marines.

Methods: Data were collected from 927 Marines from three USMC commands. Volunteers completed a survey and participated in semi-structured focus groups. The survey items focused on demographic and occupational characteristics, behavioral habits, video gaming habits, why ADSMs play video games, and functional effects. Validated tools were used to assess depression (Patient Health Questionnaire-8), generalized anxiety (GAD-7), excessive daytime sleepiness (Epworth Sleepiness Scale), and drinking habits (Alcohol Use Disorders Identification Test for Consumption-AUDIT-C).

Results: The study sample included predominantly males (854, 92.3%) and enlisted personnel (771, 83.3%). Also, 850 (91.7%) Marines reported playing video games (799 [94.0%] males). Gamers reported playing VGs predominantly later in the day (i.e., after work and before bedtime). Approximately 16% of gamers reported sleeping later because of playing VGs when at home/off duty, ~14% when on duty/in port, and ~5% when deployed/underway. When deployed/underway, most gamers reported playing video games in their racks (93.2%). Gamers reported symptoms of depression (~23% of ADSMs), generalized anxiety (~19%), excessive daytime sleepiness (~33%), and AUDIT-C scores suggestive of heavy drinking (39%). Excessive gamers tended to be younger, used dysfunctional coping styles more frequently, and played VGs more frequently and for more hours. Excessive gamers were more likely to report sleeping later because of playing VGs and to be identified with symptoms of depression, anxiety, and excessive daytime sleepiness.

Conclusion: This study provided valuable insight into how video gaming habits affect ADSM sleep patterns. Further research is needed to objectively assess the relationship between video gaming and sleep in operational conditions.

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0022

IMPROVING PREDICTED EFFECTIVENESS OF SHIFTWORKERS IN WATCHFLOORS

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Introduction: In support of 24/7 hour operations around the globe, Navy and Marine Corps shore-based watchfloors provide information, intelligence, and technical support to the warfighter. Personnel working on these watchfloors are challenged to obtain consistent sleep due to shift working. The study objectives were to model the predicted effectiveness (PE) of the current watch schedule and recommend a new schedule to improve sleep, safety, and performance.

Methods: In a 3-week longitudinal, naturalistic study, we assessed the work/rest patterns and well-being of watchstanders while on their typical watch schedule. Participants (N=11, age:19-33yrs) completed an online sleep/activity log for the study period. Standardized tools (Pittsburgh Sleep Quality Index--PSQI, Epworth Sleepiness Scale--ESS, Insomnia Severity Index--ISI, Profile of Mood States--POMS) were completed pre/post-study. Based on study findings combined with information gathered from the command leadership, we designed an improved watch schedule. The Fatigue Avoidance Scheduling Tool (version 3.3.01T) employing the Sleep, Activity, Fatigue, and Task Effectiveness model (SAFTE/FAST) was used to model PE in the legacy and newly improved watch schedules.

Results: The median daily reported sleep duration was 6hrs (range: 5-8.5hrs). Nine participants (82%) were classified as poor sleepers and six (55%) had elevated daytime sleepiness. Four (36%) participants had moderately severe/severe insomnia symptoms. In terms of mood, 10 (91%) participants had a lower vigor-activity score than the adult norms, whereas eight (73%) scored higher than the adult norms for fatigue. The mid-shift watches had low PE that dropped steeply throughout the shift. The timing of low PE coincided with the period in which personnel was briefing leadership and/or commuting from work.

Conclusion: Based on our findings, we recommended a schedule that enables more regular sleep patterns. Compared to the legacy schedule, the new schedule increased both the number of week days and weekend days off, with 2-3 full weekends off per month. Also, PE was improved and the trough in PE did not occur during the commute. Lastly, we recommended that the new watch schedule should rotate less frequently with longer times on an assigned shift.

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0023

SCREEN TIME AND INSOMNIA SYMPTOMS IN UNIVERSITY STUDENTS

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Introduction: Prior research has demonstrated a relationship between screen time and sleep health, but more work is needed to understand the potential impact of reason for screen time and timing (i.e., weekend vs. weekday). This study aimed to determine